

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Overview of USEPA's Proposed Guidance on Implementation Of the Eight Hour Ozone Health Standard June 4, 2003

Introduction

The United States Environmental Protection Agency (U.S. EPA) issued a proposed rule concerning the implementation of the Eight-Hour Ozone Standard on May 14, 2003, and published in the Federal Register on June 2, 2003. The sixty-day public comment period for the proposed rule closes August 1, 2003. U.S. EPA expects to issue a final rule on an implementation approach by the end of this year.

This proposed rule does not provide regulatory text or outline specifics regarding how implementation will occur. Instead, it describes two basic options for what will be required of areas designated nonattainment under the eight hour ozone health standard.

You can view the proposed rule at the following location:

<http://www.epa.gov/airlinks/ozoneproposedrule.pdf>

Background and Purpose of this Document

Under the Clean Air Act (the Act), U.S. EPA is responsible for (1) establishing ambient air quality standards to protect the public health and welfare; (2) determining which areas of the country have air quality that does not meet those standards; and (3) overseeing states' efforts to develop and implement plans to improve air quality in those areas. The Act lays out basic requirements and procedures for the clean air planning process, but U.S. EPA issues more specific guidance to help states, citizens, businesses and local governments comply with the Act's requirements.

The proposed guidance recently issued by U.S. EPA addresses implementation of the eight hour ozone standard, which was promulgated by U.S. EPA in 1997. It is lengthy, complex, and contains many options. U.S. EPA is seeking comment from all interested parties on what the final guidance should require. Because of the length and complexity of the proposed guidance and because of the importance of this process to Indiana citizens and businesses, IDEM is providing this summary. Our goal here is to identify the key issues, not to explain every nuance or detail of the proposed guidance. Additional materials are available on U. S. EPA's website and IDEM staff are available to answer questions.

Basic Approaches to Ozone Attainment Planning in the Clean Air Act

Requirements for nonattainment areas are contained in Part D of the Act. Subpart 1 of Part D, entitled "Nonattainment Areas in General," establishes basic requirements for areas designated as nonattainment for air quality standards. Key basic requirements are:

- 1) Submission of a clean air plan no later than 3 years from the date of designation;
- 2) Attainment of the health standard no later than 5 years from the date of designation;
- 3) Inclusion in the plan of enforceable measures chosen by the state with public input to reduce the pollutants that are causing or contributing to air quality violations sufficient to meet the health standard; and
- 4) Inclusion of permitting regulations, known as “nonattainment new source review,” that are stricter than permitting regulations in areas where air quality meets health standards.

These requirements are contained in Sections 172 and 173 of the Act.

Because many areas of the country were having difficulty meeting the ozone attainment deadlines of the 1980’s, in 1990 Congress added Subpart 2, “Additional Provisions for Ozone Nonattainment Areas.” Subpart 2 established a much more structured approach for these areas to make continued progress towards and ultimately meet the clean air goal. Subpart 2 establishes classifications of nonattainment (marginal, moderate, serious, severe and extreme), based on air quality monitoring data, and a graduated system of attainment dates and mandatory control programs. At the lowest level of nonattainment (marginal), requirements were minimal: plans needed to include the stricter permitting program for nonattainment areas and some basic technology requirements for certain types of industrial operations. These areas were expected to attain the standard within three years. At the highest level (extreme), requirements included even stricter permitting requirements, aggressive programs for motor vehicles, and plans that would reduce ozone causing pollution by 3% per year until the attainment date, which was 2010. Subpart 2 is contained in Sections 181 through 185(b) of the Act.

Another program that applies automatically in all nonattainment areas, whether under Subpart 1 or Subpart 2, is “transportation conformity.” Very basically, this program requires communication and cooperative planning between transportation and air quality agencies, so that the impacts of proposed transportation projects on air quality are understood and evaluated and the impacts of air quality planning on future transportation needs are also assessed. Expected emissions from proposed transportation projects must fit within a mobile source “budget” established as part of the clean air planning process.

Highlights of U.S. EPA’s Proposed Implementation Guidance

U.S. EPA has proposed two basic options for the implementation of the new ozone standard. Option 1 relies entirely on Subpart 2, and Option 2 uses a combination of Subpart 1 and Subpart 2.¹ Option 1 is entirely based on Subpart 2. Areas would be classified as marginal, moderate, serious, severe, or extreme (based on the most recent air quality data) and would be subject to the graduated series of control requirements specified in Subpart 2 for each classification. Under Option 2, U.S. EPA would first determine if an area qualified for classification under Subpart 2 based on its one hour ozone values (i.e. a regional one hour value greater than 120 parts per billion). If it did, it would be classified under Subpart 2 in the same manner as under Option 1. If it did not, it would be governed by the basic provisions of Subpart 1. The U.S. EPA’s preferred approach is Option 2.

¹ Even though it seems that Subpart 2 was uniquely crafted to address the one hour ozone standard, which has now been replaced by the eight hour standard, the United States Supreme Court determined that U.S. EPA could not ignore Subpart 2 in determining the requirements for implementation of the new standard. U.S. EPA has therefore developed two options that incorporate the requirements of Subpart 2 in different ways, attempting to assure expeditious achievement of the air quality goals while providing as much flexibility as possible to states in how to meet those goals.

How Indiana Counties Would Be Affected

The Indiana Department of Environmental Management (IDEM) has reviewed the proposed rule and has prepared the following summary to illustrate how Indiana's at-risk areas may be affected by the two implementation approaches that the U.S. EPA has proposed:

Implementation Option 1 (All areas classified under Subpart 2)

	Region High 8-Hr. Value (thru 2002)	Likely Classification	Attainment Deadline
Louisville MSA	0.09	Marginal	April 15, 2007
Evansville MSA	0.087	Marginal	April 15, 2007
Fort Wayne MSA	0.088	Marginal	April 15, 2007
Indianapolis MSA	0.093	Moderate ¹	April 15, 2010 ¹
Gary PMSA (Lake and Porter)	0.092	Moderate ¹	April 15, 2010 ¹
LaPorte County	0.092	Moderate ¹	April 15, 2010 ¹
Terre Haute MSA	0.091 ²	Marginal	April 15, 2007
South Bend/Elkhart MSAs	0.09	Marginal	April 15, 2007
Gibson County ⁵	0.071	Attainment	N/A
Perry County	0.09 ³	Marginal	April 15, 2007
Jackson County	0.085	Marginal	April 15, 2007
Greene County	0.089	Marginal	April 15, 2007
Carroll County	0.087 ²	Marginal	April 15, 2007
Delaware County	0.089 ²	Marginal	April 15, 2007
Dearborn & Ohio Counties	0.1	Moderate ²	April 15, 2010 ²

Implementation Option 2 (Uses both Subparts 1 and 2)

	Region High 1-Hour Design Value (<or>.121ppm)	Likely Classification	Attainment Deadline
Louisville MSA	0.112	No classification (Subpart 1)	No later than April 15, 2009
Evansville MSA	0.115	No classification (Subpart 1)	No later than April 15, 2009
Fort Wayne MSA	0.104	No classification (Subpart 1)	No later than April 15, 2009
Indianapolis MSA	0.119	No classification (Subpart 1)	No later than April 15, 2009
Gary PMSA (Lake and Porter)	0.122	Moderate (Subpart 2) ²	April 15, 2010 ²
LaPorte County	0.135	Moderate (Subpart 2) ²	April 15, 2010 ²
Terre Haute MSA	0.108	No classification (Subpart 1)	No later than April 15, 2009
South Bend/Elkhart MSAs	0.115	No classification (Subpart 1)	No later than April 15, 2009
Gibson County ⁵	0.088	Attainment	N/A
Perry County	0.11 ³	Multiple Options (Subpart 1) ⁴	No later than April 15, 2009
Jackson County	0.099	Multiple Options (Subpart 1) ⁴	No later than April 15, 2009
Greene County	0.1	Multiple Options (Subpart 1) ⁴	No later than April 15, 2009
Carroll County	0.103	Multiple Options (Subpart 1) ⁴	No later than April 15, 2009
Delaware County	0.101	No Classification (Subpart 1)	No later than April 15, 2009
Dearborn & Ohio Counties	0.116	No Classification (Subpart 1) ⁶	No later than April 15, 2009

¹ Area can qualify for marginal classification under Subpart 2 if attainment can be demonstrated for 2007 (3 years

earlier than moderate attainment deadline)

² 2-year average 4th high value.

³ 1999-2001 Monitoring Data

⁴ Area could be designated nonattainment with no classification, or classified as an "Overwhelming Interstate Transport" area.

⁵ If designated part of Evansville Area, scenarios will be consistent with those referenced for Evansville.

⁶ U.S. EPA could designate the Greater Cincinnati area as a Moderate nonattainment area under Subpart 2 if it deems its history with the one-hour standard and .100 eight-hour design values warrant it.

What Will The Requirements Be for Nonattainment Areas Under Option 1 or Option 2?

For any area designated nonattainment, Indiana must work with local communities to develop a clean air plan, which would be due April 15, 2007. The plan must contain an air modeling demonstration showing that the control measures in the state's plan, along with any other regional or national measures, will improve air quality. For areas required to meet the ozone standard by 2007, however, states may use existing modeling studies (since U.S. EPA anticipates that those areas will be able to meet the standard once current control programs, such as the regional NO_x reductions, are fully implemented). According to the draft guidance, mandatory reduction programs would vary depending on whether U.S. EPA decides to use Option 1 or Option 2.

Under Option 1, most areas in Indiana would be classified as "marginal" and would be required implement the following measures:

- 1) *Reasonably Available Control Technology (RACT)*. RACT is a series of rules that apply to certain types of existing businesses that emit volatile organic compounds, primarily coating, degreasing and petroleum handling activities. Indiana's RACT rules are contained in Article 8 of the Indiana Administrative Code. Businesses would be given a certain amount of time to meet these requirements.⁷
- 2) *Nonattainment area New Source Review (NSR)*. This would include the requirement for new sources over a certain size to meet the lowest achievable emission rate for their operations and to offset any new emissions by decreasing pollution at some other business or operation at a ratio of 1.1 to 1.
- 3) *Transportation Conformity*. This program is explained above.

Areas that meet the "moderate" classification would need to implement these first three measures as well as the following:

⁷ The guidance offers two options for the RACT requirement for areas that would be classified as moderate or above under Subpart 2. Under the first option, these areas would be required to meet the traditional technology-based RACT control requirement described above. Under the second option, if the area is able to demonstrate attainment of the standard as expeditiously as practicable with other control measures in the SIP, then the industry specific controls would not be required.

- 4) *Basic Vehicle Inspection and Maintenance Program*. This would be similar to the vehicle emissions testing programs currently in place in Lake, Porter, Clark and Floyd Counties, requiring a biennial emissions test of cars and light duty trucks that are five or more years old.
- 5) *Stage II Vapor Recovery*. This program requires devices on gasoline pumps that capture vapors during fueling.
- 6) *New Source Review*. The offset requirement for new sources of emissions would be increased to 1.15 to 1.

Under Option 2, some areas would be covered by Subpart 1. Requirements for those areas include:

- 1) *New Source Review*. But the draft guidance does not specify the exact requirements of new source review for these areas.
- 2) *Reasonably Available Control Technology*. See above.
- 3) *Transportation Conformity*. See above.

Requirements for areas classified under Subpart 2 as either marginal or moderate would have the same measures as listed above under Option 1.

The draft guidance proposes that mandatory controls can be waived if state can prove that the application of the controls produces "absurd results".

What About Areas That Are Significantly Affected by Pollution from Upwind Areas?

U.S. EPA also proposes a classification called "Transport Areas" for essentially rural areas where monitored air quality exceeds the health standard. An area would qualify for this classification if the state submits a demonstration that the poor air quality in the area is due to "overwhelming transport" of pollution from upwind areas. Only counties that are not within or adjacent to a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area would be eligible for this classification. A Transport Area would be subject to the same requirements as a marginal area, though less strict new source review requirements could apply and the attainment date would be consistent with the attainment date of the upwind areas that are contributing to the rural area's pollution.

Other Flexibility in the Proposed Guidance

U.S. EPA has included in the guidance an incentive program for areas that would be classified as moderate or above. Suppose an area would be classified as moderate, with an attainment date of 2010. If the state submits an attainment demonstration for that area, with modeling, that shows it can meet the standard by 2007, (i.e., the attainment date for marginal areas), U.S. EPA could classify it as marginal. This lower classification would provide additional flexibility to the area to choose reduction measures rather than the group of measures required for moderate areas. U.S. EPA specifically seeks comment on how this incentive would work.

Specific Proposals for New Source Review

The U.S. EPA proposes three options for NSR, which could be implemented in conjunction with each other:

1. A “status quo” NSR program under which Subpart 1 areas would be covered by Subpart 1 NSR, while Subpart 2 areas would be covered by Subpart 2 NSR.
2. A more flexible “Transitional” NSR program for areas that submit early SIPs and that attain early. This program would be available to areas covered under Subpart 1 that are attaining the 1-hour ozone standard.
3. A “Clean Air Development Community” program that would allow a more flexible NSR program for areas that manage growth in emissions-producing activities.

As mentioned above, the proposed guidance raises many issues and options, only some of which are addressed in this summary. IDEM encourages interested parties to review the proposed guidance and provide comment to U.S. EPA on these or other issues of concern.